



NOAA FISHERIES

Office of Aquaculture

Growth of American marine aquaculture is an opportunity to support local seafood production, strengthen coastal community resilience, and ensure a safe, secure, and sustainable supply of seafood.

Alaska Region Aquaculture



Photo credit: Mike Stekoll, University of Alaska

AQUACULTURE IN THE REGION

Alaska has been exploring opportunities for expanding marine aquaculture, also known as mariculture, in the state. In Alaska, aquaculture contributes to restoration efforts, and increasing economic opportunities for coastal communities through the farming of shellfish and seaweed. To date, commercial aquaculture activities have been relatively small-scale and have involved Pacific oysters, seaweed, and blue mussels. Research projects have included sea cucumbers, geoducks, and blue and red king crab. Finfish farming is prohibited by law in state waters. Currently, most farming operations are located along the coastline in either Southeast or Southcentral Alaska.

In 2016, Alaska Mariculture Initiative formed a Mariculture Task Force and laid out a comprehensive Mariculture Development Plan to accelerate the development of mariculture to grow a \$100 million industry over the next 20 years. The initiative and Task Force have increased awareness and confidence in private sector investment, leading to a 400% increase in new farm applications to the state.

To help Alaskans advance this ambitious goal, the Alaska Regional Office and Pacific States Marine Fisheries Commission held the first NOAA Fisheries Alaska Mariculture Workshop in Ketchikan, Alaska January 21-22, 2020. The workshop brought together a wide variety of mariculture stakeholders to discuss emerging issues, identify needs related to three main topics – research, **policy/permitting**, and access to capital – and determine how the agency can best engage in these areas to help develop marine aquaculture in Alaska. The Alaska Fisheries Science Center continues to conduct research and form partnerships to support and expand aquaculture within the state and connect to the national effort.

ECONOMIC BENEFITS OF AQUACULTURE

U.S. marine aquaculture is an important industry. In fishing and coastal communities, it creates year-round jobs that support resilient working waterfronts and economic development. In 2019, Alaska’s aquaculture production sales totaled \$1.4 million.

Nationwide, aquaculture production is valued at \$1.5 billion. The industry also supports sectors such as seafood processing, feed and equipment manufacturing, and food service.

SHELLFISH INITIATIVE

NOAA Fisheries is working to increase populations of bivalve shellfish in coastal waters—including oysters, clams, and mussels—through commercial production and conservation activities. NOAA recognizes the broad suite of economic, social, and environmental benefits provided by increasing shellfish populations, including:

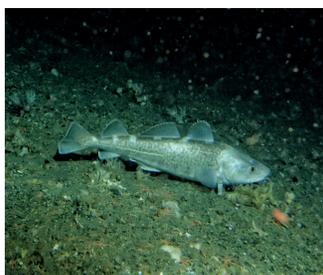
- Meeting a growing seafood demand
- Cleaner water and nutrient removal
- Shoreline protection
- Native shellfish restoration

NOAA collaborates with public and private partners to streamline marine planning and permitting, environmental research, restoration and farming techniques, and innovative financing. NOAA also coordinates with other federal agencies and participants from industry, restoration groups, academia, states, tribes, and other stakeholders to

increase shellfish production around the nation. In 2013, Alaska launched an initiative to promote aquaculture within the state.

AQUACULTURE BY THE NUMBERS

- Oceans cover over 70% of the Earth’s surface, but account for only 2% of food production. With limited arable land and fresh water, the world is turning to the oceans for additional food as the global population is projected to increase to 9 billion by the year 2050.
- Nationwide aquaculture production is valued at \$1.5 billion. In 2019, aquaculture production sales in Alaska totaled \$1.4 million.
- The U.S. aquaculture industry is currently focused on production of high-value food species. Thus, while the value of U.S. aquaculture production equals about 21% of the value of total U.S. seafood production, the volume equals about 7% of the total production.
- Globally, aquaculture supplies more than 50% of all seafood produced for human consumption—this percentage continues to rise.



For more information about aquaculture in Alaska, contact Regional Aquaculture Coordinator Alicia Bishop (alicia.bishop@noaa.gov).

